

NAMIBIA MARBLE AND GRANITE (PTY) LTD



Annual Operational Monitoring Report

17 August 2022



PROJECT INFORMATION

Project Title: **EXPLORATION AND MINING AT ML142**

Project Location: **KARIBIB, ERONGO REGION**

Report Title: **ANNUAL OPERATIONAL MONITORING REPORT**

Report Date: **17 August 2022**

Competent Authority: **MINISTRY OF MINES AND ENERGY**
PRIVATE BAG 13297
WINDHOEK

Approving Authority **DIRECTORATE OF ENVIRONMENTAL AFFAIRS**
MINISTRY OF ENVIRONMENT AND TOURISM
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PHOTO REPORT

PART 1: INTRODUCTION

1.1 BACKGROUND

Namibia Marble & Granite (Pty) Ltd (NAMAGRA), the owner of ML142, operates a marble mine, located on Farm Habis No. 71, approximately 25km to the south of Karibib Town along the MR77 district road within the Erongo Region.

In compliance with section 27 of the Environmental Management Act, 2007 (Act 7 of 2007), an Environmental Clearance Certificate (ECC) was obtained during 2014 for the on-site listed activities, as defined within Government Notice No. 29 of 2012. Since 2014 the ECCs (i.e., mining activities and solar plant) was kept up to date, with the latest ECCs expiring on 29 January 2024 (ML142) and 20 October 2023 (Solar Farm).

The particular mining activity has been in existence prior to the first EIA conducted, dated January 2014. The mentioned EIA was accordingly conducted considering the status of the site and surroundings at the time (i.e. January 2014).

In compliance with the initial ECC and that of 2021, NAMAGRA has appointed Urban GREEN cc to undertake the monitoring and evaluation of their on-site activities at ML142 and produce an annual report for submission with the Approving Authority and Competent Authority.

In preparation of this annual report, all environmental reports and documentation, pertaining to ML142 was reviewed, followed by a site visit and on-site monitoring evaluation, dated 17 August 2022. The on-site monitoring evaluation comprised of a visual inspection, guided by the EMP (dated June 2017), followed by a verbal feedback to NAMAGRA on potential impacts and mitigations, as well as matters requiring attention and/or implementation, followed by this Annual Monitoring Report.

For purpose of consistency and keeping with the known format to NAMAGRA, the same method of evaluation and reporting style was used, with minor amendments grouping similar impacts with each other.

Following the method of evaluation set by the EMP (dated June 2017); the level of compliance has been indicated by means of three (3) main colours, i.e. green, orange and red. 'Green' indicates high level of compliance to the EMP and these areas should be maintained or even "bettered". 'Orange' indicates less satisfactory compliance, which requires attention, with the 'red' being more critical as it indicates non-conformance.

1.2 OPERATIONAL MONITORING

1.2.1 OVERVIEW

Environmental monitoring is defined as *'an activity undertaken to provide specific information on the characteristics and functions of environmental and social variables in space and time'*

and is therefore one of the most important components of an EIA with EMP, which is essential for:

- Ensuring that impacts do not exceed the legal standards;
- Checking the implementation of mitigation measures in the manner described in the EMP report, and
- Providing early warning of potential environmental damages.

This Environmental Monitoring Report, along with all other reports will serve the purpose of –

- Recording environmental compliance during the operational phase;
- Providing information to the Approving Authority and Competent Authorities; and
- Serve as supporting documentation on application for Environmental Clearance Certificate renewal¹.

1.2.2 DURATION & TIME FRAME

Operational monitoring has and will remain to be done over the entire operational period.

Bi-monthly monitoring is done by NAMAGRA, while the annual monitoring is done by Urban Green cc.

¹ Due on 29 January 2024 (ML142) and 20 October 2023 (Solar Farm), respectfully.

PART 2: ENVIRONMENTAL REPORTING

2.1 INTRODUCTION

This part of the Operational Monitoring Report provides a summary of the findings following the on-site inspection of 17 August 2022 and the corrections recommended for implementation by the Proponent.

2.2 FINDINGS

2.2.1 RECORD KEEPING

All records related to the implementation of the management plan (e.g. site instruction book, induction records, safety training completed and environmental management plan) were available from the on-site office.

2.2.2 SITE LAYOUT AND FOOTPRINT

Between January 2004 and January 2014, when the EIA was conducted, there was a change and increase in the layout of the site and the extent thereof.

Between 2013 to 2016, there was a minor increase to the north-eastern side of the mining pit, with a new test site to the north-western side of the prominent outcrop located to the south-east of the main mine pit.

During October and November 2018 the footprint of the site expanded slightly to the south-west to make provision for the mining rock dump site and also to the far north-east to provide for additional land for storage of stock. During the same time three new test sites was opened-up to the south-eastern side of the prominent outcrop located to the south-east of the main mine pit.

Between 2018 to date the larger site and footprint has remained fairly unchanged. Since the previous annual monitoring visit (August 2021) there has been no change to the main mining area, while extension of the footprint and additional road is planed within the year 2022/23.

This potential impact is accordingly listed as '*green*' having no negative impact and complying with the listed mitigations.

2.2.3 SURFACE & GROUNDWATER (Section 3.4 of EMP)

Neither the EIA Report nor the EMP Report makes any notice of the baseline of the geological and hydrological conditions of the site with relevance to potential pollution of surface and/or underground water sources.

(i) *Potential Pollution*

Potential sources of pollutants identified on-site are the workshop with wash-bay, temporary mining waste dump site, the septic tank at the ablution facility and machinery throughout the site.

The site does not host any natural water bodies nor does the site fall within a prominent river catchment area. Rainwater collects within the mining pit during the rainy season, but is seasonal in nature and artificial.

Management of hazardous substance is crucial considering the nature of the activity. The permanent above ground fuel facility in the mining area is properly maintained to standard, while the temporary fuel facility does not comply and will be removed from site (flagged orange). No spillages of any nature were found at the fuel storage facilities or workshop and/or larger site. The method of emptying and storage of used oil at the workshop is well maintained without any negative implications (flagged green).

The concrete wastewater holding tank is in good condition and does not show any signs of leakage and/or seepage. The remains of the old septic tank that was flagged during the site visit of 2021 has been cleaned-up and removed from site and dumped at the Karibib Town Council Dump site. The activity is accordingly flagged as '*green*'.

Apart from the security guard remaining on-site 24/7 no other person is residing on-site. All personnel are transported to the mine and back to Karibib Town on a daily basis. As a result the kitchen, sleeping courters and ablutions, apart from the toilets are no longer in use. The particular component is accordingly flagged '*green*'.

The mining waste dump site has been sorted and cleaned up moving the issue from the previous '*yellow*' to '*green*'. The remainder of the site is considering '*green*' with respect to successful compliance.

This status has been improved from the previous monitoring, dated August 2021 and is flagged '*green*'.

(ii) *Water Demand & Supply*

Water for mining operations is trucked-in from the NAMWATER Pipeline take-off along the MR77 and stored on-site, while water for human consumption purpose is obtained from a borehole owned and managed by the Farm owner.

Monthly consumption over the last 12 months showed an increase, but similar to the years prior to the COVID pandemic, when operations ceased for certain times. Neither NAMWATER nor the farm owner has indicated any emergencies or caution to be applied.

This potential impact is accordingly listed as '*green*' having no negative impact and complying with the listed mitigations.

This status remains the same as per the past 5 years.

2.2.4 FAUNA AND FLORA (Section 3.4 of EMP)

The EIA Report defines the area as having a low diversity and endemism of birds, amphibians, plants and large mammals.

Considering the nature of the activity, no fauna & flora exists within the footprint of the operational areas. Local indigenous flora and expected fauna exists on the periphery of the operational areas and along the main access road to the mining area.

With no expansions to the existing disturbed areas, no fauna and/or flora have been affected since the previous site monitoring visit dated August 2021.

From the site visit conducted, no evidence of any harm to the fauna & flora on the periphery or along the access roads exists. This potential impact is accordingly listed as 'green' complying with the listed mitigations.

This status remains the same as per the previous monitoring, dated August 2021.

2.2.5 VISUAL AND SENSE OF PLACE (Section 3.4 of EMP)

The sense of place since conducting the EIA in January 2014 was defined by the mining activities at the particular time, which has not expanded towards the south, i.e., in the direction of the Etusus Lodge.

The fact that the mining site is located within and surrounded with prominent outcrops, which has apart from a few test sites (south-eastern side of the prominent outcrop located to the south-east of the main mine pit) been in pristine condition, has provided effective screening from other receptors.

With no expansion since the visit of August 2021, there is no change to the visual affect.

Since the previous monitoring, dated August 2021, this potential impact remains 'green'.

2.2.6 ARCHAEOLOGY AND HERITAGE (Section 3.4 of EMP)

Contrary to the EIA Report (2014), which indicated that there are no known areas of heritage and cultural importance in the mining area, bushmen paintings were discovered during July 2022 outside of the active mining area to the north-eastern side of the main mining area.

Registration of the archaeological find with the National Heritage Council is being driven by the land owner of the in assistance by Mr. Manfred D !Gaeb, Deputy Director – Arts and Creative Industries, Ministry of Education, Arts and Culture.

NAMAGRA has been informed of the archaeological find by the landowner and requested to avoid the site and not conduct any activity at or close to the archaeological find.

This status remains the same as per the previous monitoring; dated May 2020, i.e., 'green'.

2.2.7 HEALTH, SAFETY AND SECURITY (Section 3.4 of EMP)

(i) Health

The EIA Report list 'air quality' and resulting impact on human health due to fugitive dust as the important factor having potential health implications. Other safety concerns such as general health and noise impacts during operations are equally important.

Considering the nature of the activity and resulting large volumes of mining dust on-site, protective clothing and gear should be available and used, especially during times of high winds (i.e. August to October).

During the time of the visit (August month) no impact existed, mainly as a result of no winds on the day. Other mitigations listed within the EMP were applied, as observed. Minor incidents did occur, but resolved at the time, as presented in the Bi-monthly Reports (August 2021 to August 2022).

This potential impact is accordingly listed as '*green*', having no negative impact.

This status remains the same as per the previous monitoring, dated August 2021.

(ii) Safety

Personnel and visitors' safety, as well as traffic safety along access roads are crucial to achieving zero incidences and are accordingly well documented within the EMP.

From the site visit and observations all mitigations as applicable was adhered to and implemented. The severity of winds should constantly be monitored and operations stopped when visibility deteriorates. The training done contributes to awareness and safe operations, which should continue to be done.

This potential impact is accordingly listed as '*green*' complying with the listed mitigations.

This status remains the same as per the previous monitoring, dated August 2021.

(iii) Security

The mining area is located far from any urban areas or related higher populated activities. The fact that the mine is hidden by the surrounding outcrops and located far from any other human activity makes the site from a security point of few very safe.

From the site visit it can be recorded that access to the larger mine area is controlled via access gate and fence, while access to the mining site itself is controlled with boom and security guard.

This potential impact is accordingly listed as '*green*' complying with the listed mitigations.

This status remains the same as per the previous monitoring, dated August 2021.

2.2.8 WASTE MANAGEMENT (Section 3.4 of EMP)

Considering the activities of different kind taking place on site, different types of waste is generated and require specific management, as highlighted by the EIA Report (January 2014).

The waste management plan focusing on reduce, reuse, recycling and segregation of waste types is still applied and kept operational. Mining waste is stored at the mining dump site, which is well managed and maintained. Waste of a hazardous nature is stored within the allocated mining waste dump site and removed from site to the applicable dump sites.

From the on-site observation all waste types are well managed and shows no signs of any negative impact.

This potential impact is accordingly listed as '*green*' complying with the listed mitigations.

This status remains the same as per the previous monitoring, dated August 2021.

2.2.9 SUSTAINABLE PRACTISES

Namagra's harvesting of rainwater and reuse to supplement the intake of raw water from NAMWATER, as well as the on-site solar energy plant are both activities contributing to minimizing the mine's carbon footprint and contributing to sustainable practices.

The mining pit did not contain any rainwater at the time of visiting the site, although some underground water surfaced within the lowest point of the main mining pit. These waters are pumped and stored at an open-air reservoir for reuse to the mining activities.

This potential impact is accordingly listed as '*green*' complying with the listed mitigations.

This status remains the same as per the previous monitoring, dated August 2021.

2.3 ACTION REQUIRED

The temporary fuel storage tank should either be removed from site or should be installed on-site as per the legal requirements and prescriptions of the EMP. Further to the mentioned, no other action is required from the side of NAMAGRA.

2.4 CONCLUSION

The mining area is well maintained in line with the requirements of the Environmental Management Plan and international best practise.

SITE PHOTOS



Photo 1 – View of rock containing busman paintings (-22.102732° 15.818595°).



Photo 2 – View of bushman paintings.



Photo 3 – View of guarded entrance to mining area with boom gate.



Photo 4 – View of safety warning signs at entrance to mining area.



Photo 5 – View of separation recycling waste collection area.



Photo 6 – View of information board, fire extinguisher and medical safety kit at workshop area.



Photo 7 – View of storeroom, neat and tidy.



Photo 8 – View of safety and warning signs at workshop.



Photo 9 – View of workshop area.



Photo 10 – View of container storage areas.



Photo 11 – View of cleaned-up mining waste dump site.



Photo 12 – View of worker equipped with protective gear and clothing at working site.



Photo 13 – View of well layout and neat mining site.



Photo 14 – View of warning sign at high voltage overhead power line and generator.



Photo 15 – View of under roof storage area.



Photo 16 – View of stone bagging section.



Photo 17 – View of fuelling area, well maintained.



Photo 18 – View of fire extinguisher and warning signs at fuelling area.



Photo 19 – View of mining machinery at work on-site. All machinery is well maintained and in good operational condition.



Photo 20 – Vie of emergency assembly point.



Photo 21 – View of solar plant, well maintained and operational.



Photo 22 – View of ablutions on-site, well kept, tidy and neat.

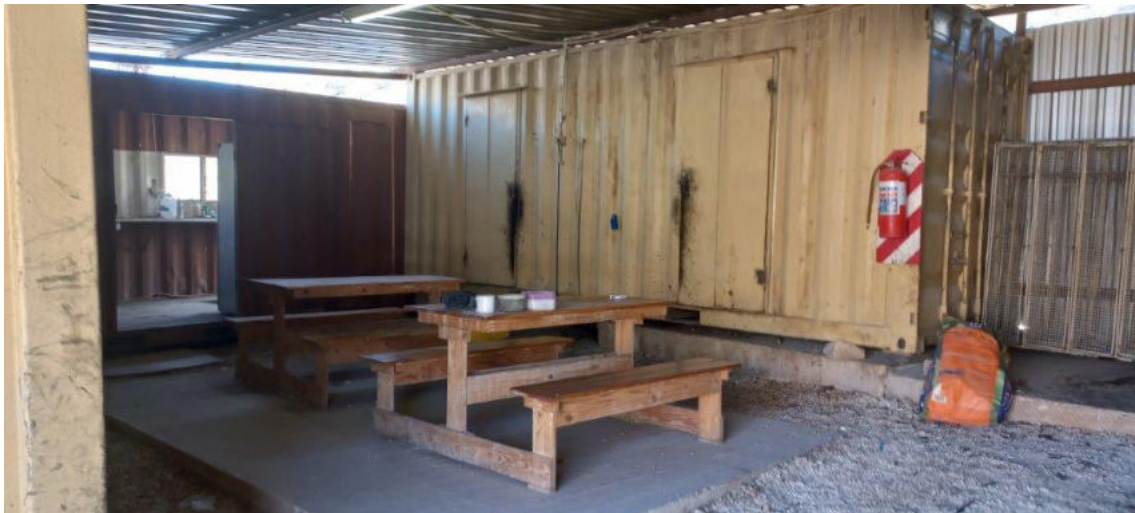


Photo 23 – View of on-site eating area. Neat and tidy with fire extinguisher.



Photo 24 – View of staff transportation vehicle. Road worthy and in good operational condition.



Photo 25 – View of mining machine, well maintained and good operational condition.



Photo 26 – View of dynamite store area, well maintained and kept safe.



Photo 27 – View of locked gate with warning sign at dynamite store area.



Photo 28 – View of internal road, which are well maintained. Vehicles remain on roads.